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Description of the Genus *STEREOLEPIS* Ayres.

BY THEODORE GILL.

Genus *STEREOLEPIS* Ayres.*Synonymy.*= *Stereolepis Ayres*, Proc. California Acad. of Nat. Sci., vol. ii. p. 23, 1858.*Centropristis* sp. *Owen*.*Oligorus* sp. *Günther*.

Body oblong, highest at or behind the ventral fins, thence above rapidly declining to the caudal fin with the vent posterior and the caudal peduncle narrowed to the base of the fin.

Scales rather small, mostly in very oblique rows, obliquely quadrangular and as high as or higher than long, with the nucleus more or less behind the centre, with concentric striæ and folds, and radiating linear grooves diverging from the nucleus towards the middle third of the anterior margin; the posterior margin unarmed and bordered by a membranous extension.

Lateral line scarcely impressed, parallel with the back.

Head nearly or quite as high as long, with the profile nearly straight and rapidly declining from the nape to the snout; the forehead broad and transversely convex. Scales on cheeks and opercula similar to those of the body; on the crown and middle of forehead between the eyes small and imbedded in the skin. Snout, preorbitals and jaws naked. Eyes entirely in the anterior half of the head, small and subcircular. Nostrils double, simple nearly central between the snout and eye, and closely approximated. Preoperculum rectangular, produced backwards towards its angle, which is itself subangulated, slightly crenulated below its angle, entire above. Operculum unarmed, neither spinous nor with a developed internal ridge. Suboperculum behind the operculum below the angle of the latter, rounded behind and above.

Mouth rather large, with the cleft oblique, the supramaxillary continued to or below the eye. Jaws nearly even in front, lower shortest; intermaxillaries nearly as long as supramaxillary, attenuated backwards; the supramaxillary widened backwards, obliquely truncated at the end and with a supplementary piece above near the end.

Teeth on the jaws densely villiform, in a broad band interrupted at the symphysis and attenuated backwards. Vomer and palatine bones with villiform teeth.

Branchiostegal rays seven.

Dorsal fin nearly double; the spinous portion longer than the soft and longer than the head, with nine spines, very low, convex above, the third spine being longest; the posterior portion with two spines and the soft part nearly oblong, angulated before and behind, highest in front. Anal fin similar to the second dorsal, but inserted further behind, its anterior portion being under the posterior part of the latter.

Caudal fin wide, subtruncated or emarginated behind.

Pectoral fins angulated at its upper angle and with the posterior margin obliquely convex.

Ventral fins inserted below or behind the pectoral fins, of moderate size, with the first ray longest.

Type *Stereolepis gigas*, *Ayres*.

Stereolepis is most closely related to the genus *Oligorus* of Günther, and, indeed the differences between the two are not obvious from the data at hand. It is quite possible that the *Oligorus gigas*, at least, belongs to *Stereolepis*. The type of *Stereolepis gigas* Ayres is in the museum of the Academy of Natural Sciences of Philadelphia, to which it was presented by Mr. Geo. Davidson. Its weight was originally 360 pounds.

1863.]

STEREOLEPIS GIGAS, Ayres.

Hab. California.

If the *Oligorus gigas* of Günther, or *Centropristis gigas* of Owen truly belongs to this genus, the name of the Californian species must be replaced by another: that of *S. Californicus* will be appropriate.

Description of the Genus OXYJULIS Gill.

BY THEODORE GILL.

In the present article, there is given a detailed description of the genus *Oxyjulis* recently named, not hitherto described.

As the *Semicossyphus pulcher* (Günther ex Ayres) is only known through the description of Ayres, made at a time when the classification of the Labroids was far less exact than now, its generic position remains to be confirmed, although there is little doubt that it really is a *Semicossyphus*.

Genus SEMICOSSYPHUS Günther.

Synonymy.

=*Semicossyphus* Günther, Annals and Magazine of Natural History, ser. iii. vol. viii. p. 384; *ib.* in Catalogue of the Fishes in the British Museum, vol. iv. p. 99, 1861-2. Bleeker, Proc. Zoological Society of London, 1861, p. 415.

SEMICOSSYPHUS PULCHER Günther.

Synonymy.

Labrus pulcher Ayres. Proc. California Academy of Natural Sciences, vol. i. p. 3, 1854. Ayres, Proc. Boston Society of Natural History, vol. v. p. 101, 1854.

Semicossyphus pulcher Günther, Annals and Magazine of Natural History, ser. iii. vol. viii. p. 384, 1861. Günther, Catalogue of the Fishes in the British Museum, vol. iv. p. 99, 1862.

Hab.—Coast of California, at San Diego, (Ayres).

Genus OXYJULIS Gill.

Synonymy.

=*Oxyjulis* Gill, Proc. Academy of Natural Sciences of Philadelphia, 1863, p. 223.

Julis sp., Girard, Gill.

Halichæres sp., Günther.

Pseudojulis sp., Günther.

Body elongated and slender, much compressed and with the sides nearly flat, with the caudal peduncle oblong and not constricted; anus little in advance of the middle of the length.

Scales moderate, less than thirty along lateral line, small and closely appressed on the breast; each one is oblong, pentagonal, corrugated at the centre, with numerous lines radiating towards the back and posterior sides, and with fainter ones extending forwards; exposed surface rhomboid. Lateral line continuous, simply tubular, mostly concurrent with and near the back, but deflected on the scales under the posterior portion of dorsal, and thence continued on the tail along the middle to the caudal fin.

Head oblong, conic, and acute in front, slightly curved above and below, much compressed and gradually decreasing in width to the snout, transversely convex above. Snout longer than the eye. Eyes mostly or wholly in the anterior half of the head. Cheeks and opercula naked and unarmed; suboperculum with an oblong membranous extension. Nostrils simple, in front of upper angle of eye.

[Nov.